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File

1 June 1964

Dear Don,

We have reviewed the drawings on the shipping container for our take-up spool and we are in general agreement on the design concept. There are a few detail changes which we would like to recommend. Enclosed, find your drawings which we have marked.

1. Refer to sheet 2. Following the concept of primarily holding the material and secondarily positioning the spool, you have provided a circular ring of neoprene on the cover and segments of neoprene on the base to hold the material. The present dimensions of the container limit the stacking of the material to one position on the spool. We will experience stacking variations of  $\pm 1/8$ " along the axis of the spool. We suggest that the height of the container be increased by approximately  $1/2$ " to allow  $1/4$ " clearance of both the face and the beveled outer rim of the spool to their respective "floors". The center shaft should also be modified so that it does not limit axial movement of the spool. These changes will accomodate the stacking variations and insure no axial loads being applied to the spool. We would also like some protection for the beveled rim in the form of an  $1/8$ " thick neoprene ring or segments.
2. It was also suggested that the neoprene be changed to sponge rubber or that the neoprene ring on the cover be segmented to match those on the base and that the present axial spacing be reduced from 6.650 to 6.60, or both. The reason for this is to create a "softer squeeze" and one which will accomodate greater stack width variations. The stack width may vary between approximately 6.620 and 6.750 depending on the quality of stack obtained.
3. Since the proposed container has holes in both cover and base, we assume this container must be put into another light tight container. We also assumed that this container must be wrapped or enclosed in a plastic cover to prevent dirt from entering the container. We believe the construction of a prototype is very desirable. This would serve as both a design check and permit practical checkout of any handling problems. (The prototype would also satisfy a need to have one outer spool shipping container for emergency, non-area landings.)

If you feel a meeting on the final Design would be of value, or should any questions arise, please feel free to contact me.

Best regards

J.M.